

IN THE SPECIFICATION:

Please amend the Specification as follows:

[0037] An annular void 72 is formed near the axial center of the base 50. In the embodiment illustrated in Figure 3, the sensor 46 is a Hall effect sensor attached to the circuit carrier 34 between each pair of tabs 32 of the tray 30. The upper disc portion 82 of the upper slide member 52 includes a retainer portion 102 that accepts and retains an emitter 104, such as a magnet. The magnet thereby moves in axial relationship to the sensor 46 that is disposed upon and in electrical communication with the electric circuit 38. Thus, the weight of an occupant will deform the seat cushion 16 such that the lower surface 20 of the lower seat cushion 16 pushes the upper slide member 52 toward the base 50. As the upper slide member 52 moves, the sensor 46 detects an increase in magnetic flux density generated by the approaching emitter 104. In this way, the sensor 46 is operable to detect movement of the upper slide member 52 toward and away from the base 50. In turn, the sensor 46 generates a responsive signal indicative of the increase in flux density, and the controller 40 controls the restraint system 42 based on these signals. The example of a sensor assembly 44 illustrated here is described in greater detail in the co-pending application, Serial No. 10/748,536 _____, entitled "Vehicle Occupant Sensing System Having a Low Profile Sensor Assembly," which is hereby incorporated in its entirety by reference. The electrical attachment between the sensor 46 and the circuit carrier 34 can be accomplished in the manner described in the co-pending application, Serial No. 10/748,514 _____, entitled "Vehicle Occupant Sensing System and Method of Electrically Attaching a Sensor to an Electrical Circuit," which is also hereby incorporated in its entirety by reference.

[0043] If the determination at decision block 210 is true, the “Yes” path is taken to decision process block 212 in which the vehicle seat is classified as empty if the summed value is negative and the calculated change is greater than the predetermined amount. This classification is passed on to the higher-level method that is beyond the scope of the present invention but will be otherwise determining the seat occupancy through the NN interpretation and processing of the data from the sensor array 45. The higher-level method will employ the “empty seat” classification determined by the present invention to override any existing occupancy classification that is incorrectly based on the slow hysteresis return of the foam seat cushion to its original shape. The higher level method of NN processing of the sensor data and the classification of the occupancy of the vehicle seat with which the present invention is employed is described in greater detail in the co-pending application, Serial No. 10/748, 504 _____, Entitled “~~Method Of Pattern Recognition And~~ Occupancy Classification In A Vehicle Seat,” which is hereby incorporated in its entirety by reference.